7. ETHNOBOTANY (Andrea B. Shea, M.A.)

INTRODUCTION

Botanical samples were examined from two contexts. The first was flotation samples recovered from four features and processed through a flotation system. The fractions were examined for charred ethnobotanical remains. A second set of samples was drawn from a level context during excavation and, after species identification, was submitted for radiocarbon dating. All of the samples were radiocarbon dated to the same time. A small assemblage was identified containing very low frequencies of charred wood and nut fragments, but no plant seeds or animal remains were found.

METHODS

Flotation samples were processed through a flotation system that collected the heavy and light fractions in 1/16-inch (0.0625-inch) screens. Both fractions were allowed to air-dry, then stored in acid-free bags.

The heavy fraction portions greater than 2 mm were examined through a magnalight for charred seeds or nut fragments. The light fractions were sieved through 1-mm and 2-mm screens. All charred plant remains were removed from the entire light fraction (using magnalight and microscope). Charred wood fragments were taken only from the portion of the light fraction greater than 2 mm.

Seed and nut identifications utilized the ethnobotanical collection held by TRC and reference materials (Martin and Barkley 1961; Montgomery 1978).

RESULTS

Flotation Samples

Seven samples from Features 3, 4 (4 subsamples), 5, and 6 were processed through the flotation system. Table 7.1 details the remains identified.

Sixty-three fragments of charred wood, bark, nuts, and nut husks were found in the four features. In addition to oak (n=4), pine (n=33), and porous-diffuse wood (n=2), identifications included bark (n=15), hickory nut (n=8), and hickory nut husk (n=1).

The limited results of the flotation provide some insights into the features. If the artifacts are divided into fuel and food, pine is consistently present across the features (Table 7.2). Oak appears only in Features 4 and 5 in Block A. Bark is confined to various samples from Feature 4. Hickory nuts and husks also appear in all of the features except Feature 6. The persistent mix of fuel and food would seem to suggest some consistency in the utility of the features. Additional suggestions about the character of the features emerge as the ethnobotanical evidence is combined with the lithic findings (see summary).

Botanical/Radiocarbon Samples

Four carbon samples were collected (Table 7.3). No samples were taken from features, as no feature material was of sufficient size for dating. The samples were collected by hand from general level

Table 7.1. Charred Remains Recovered from 31WA1137, Light Fractions.

Provenience	Bag	Description	Fragments
Fea. 3, TU 20	?	Wt.=.1 grams	
		Pine (*Pinus* sp.)	15
		Hickory nut (*Carya* sp.) <.1 g.	4
		Residual (.3 grams)	
Fea. 4, NW1/4, Zone B	552	Wt.=.2 grams	
		Pine (*Pinus* sp.)	5
		Oak (*Quercus* sp.)	2
		Bark	2
		Residual (.6 grams)	
Fea. 4, TU 33, SW1/4, Zone B	554	Wt.=.4 grams	
		Pine (*Pinus* sp.)	3
		Diffuse porous	2
		Bark	8
		Hickory nut (*Carya* sp.)	1
		Residual (1.5 grams)	
Fea. 4, TU 33, NE1/4	551	Wt.=.1 grams	
		Pine (*Pinus* sp.)	5
		Hickory nut (*Carya* sp.) .1 g.	2
		Residual (.4 grams)	
Fea. 4, TU 33, SE1/4, Zone A		Wt.=.1 grams	
		Bark	5
		Hickory nut husk (*Carya* sp.)	
		Residual (.2 grams)	
Fea. 5	555	Wt.<.1 grams	
		Pine (*Pinus* sp.)	3
		Oak (*Quercus* sp.)	2
		Hickory nut (*Carya* sp.) <.1 g.	1
		Residual (.5 grams)	
Fea. 6	556	Wt.=.1 grams	
		Pine (*Pinus* sp.)	2
		Residual (.1 grams)	

sediments in good context. Although all samples were small, they generally consisted of firm wood samples ranging up to 2 cm in length. They were first submitted for botanical identification, and then to Beta Analytic for AMS dating (see Chapter 11). All of the samples were from the lower Archaic cultural horizon in Block B.

SUMMARY

Botanical specimens from seven samples were processed from four features. The frequency of charred wood was very low. All of the features except Feature 6 contained fuel wood and also food items (hickory nut fragments). Feature 6 only contained two fragments of pine, botanically an extremely

Table 7.2. Horizontal Distribution of Ethnobotanical Artifacts as Viewed from the River.

	Block A					Block B		Total
	F4 NW	F4 SW	F4 NE	F4 SE	F5	F6	F3	
Pine	5	3	5		3	2	15	33
Diffuse porous wood		2						2
Oak	2				2			4
Hickory nut/husk		1	2	1	1		4	9
Bark	2	8		5				15
Total	9	14	7	6	6	2	19	63

Table 7.3. Botany of Radiocarbon Samples Viewed from River.

Sample	East	North	Depth, cm	Stratum	Species ID	Wt. (g)	Fragments
C14-2	126	97	70–80	3.3	Pine	0.9	6
C14-1	126	95	74–79	5.1	Hickory Nut Shell Pine	0.5	6
C14-3	124	95	68	3.1	Pine	3.9	14
C14-4	127	94	80–90	3.4	Pine	0.5	1

ephemeral feature. Feature 4, which was sampled in four separate quadrants, contained the largest amount of material (n=36). It also contained the broadest variety of material, including the only porous-diffuse wood.

The radiocarbon samples were all of pine wood, except for one sample that contained hickory nut shell. The exceptional similarity of the dates suggests that the carbon might have been from the same burning incident. The only counter-argument is that hickory nut was found in one of the samples, so the pine-hickory nut combination could represent a similar feature (see above).